# VALIDATION METHODOLOGY TO DETERMINE ETILENTIOUREA IN FILTER-PAPER DRIED UREA SPOT

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**Background and Aims:** Ethylenebisdithiocarbamates (EBDTCs) is used to eliminate pelages in the agriculture. Nevertheless, it is mixed with its metabolite Ethylenethiourea (ETU). The International Agency for Research in Cancer has evaluated the carcinogenic risk of ethylene thiourea
(ETU) to man and classified it as an antithyroid substance and as a suspect carcinogen, since this type of substance is believed to induce thyroid tumours through the suppression of thyroxin synthesis leading to hyperplasia of the thyroid gland.The methods utilized in its determination have high cost and monitored is restrictive; because is necessary major volume of sample, transport and storage. So is necessary to adapt a method for diagnostic more efficient.
To validity a methodology for the detection of ETU in sample in filter-paper dried urea spot.
**Methods:** 5 ml test tube with 2mL of urine adds 1 ml of water. The sample is keep ultrasonic-treated in water-bath for 60 min Later is mixed for 20 min a shaker it is filtered, evaporated to dryness and reconstituted with 100µL to water and injected to the chromatograph of liquids
**Results:** The limit of detection in samples liquidate (water and urine) was of 10µg/ml, we established curve of calibration with the concentrations 10, 20, 50, and 100µg/ml, of that one was obtained r2=0.94 of in water, and r2 = 0.87, in urine. The second phase is to embed samples of 2 ml of urine on filter paper to do the same extraction procedure in the process
**Conclusion:** The methodology in sample of desiccated in paper filter, resulted more efficient in the detection of ETU in urine human. Because, it methodology dimities cost and volume of sample. It assay could be used as environmental screening infantile, for detection of pesticides and it evaluate as endocrine disruptor and probable effect risk to the health.